

PTO/SB/08B (Substitute for form 1449/PTO)		Attorney Docket No.: 004-8428	
		Application No.: 10/621,072	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		First Named Inventor: Mark S. Moir	
		Filing Date: July 16, 2003	
		Group Art Unit: 2189	
		Examiner Name: Horace L. Flournoy	
		Date Submitted: January 27, 2006	
NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
JK	1	AFEK, Yehuda, "Atomic Snapshots of Shared Memory," <i>Journal of the ACM</i> , vol. 40, no. 4, pp. 873-890, 1993.	
JK	2	AGESEN, Ole et al., "An Efficient Meta-Lock for Implementing Ubiquitous Synchronization," <i>ACM SIGPLAN Notices</i> , vol. 34, no. 10, pp. 207-222, October 1999.	
JK	3	ANDERSON, James H. et al., "Universal Constructions for Large Objects," <i>IEEE Transactions on Parallel and Distributed Systems</i> , vol. 10, no. 12, pp. 1317-1332, 1999.	
JK	4	MELLOR-CRUMMEY, J., et al., "Algorithms for Scalable Synchronization on Shared-Memory Multiprocessors," <i>ACM Transactions on Computer Systems</i> , vol. 9, no. 1, pp. 21-65, February 1991.	
JK	5	PRAKASH, Sundeep et al., "Non-Blocking Algorithms for Concurrent Data Structures," Technical Report 91-002, University of Florida, July 1, 1991 [URL: <a href="http://citeseer.ist.psu.edu/prakash91nonblocking.html">http://citeseer.ist.psu.edu/prakash91nonblocking.html</a> ].	
JK	6	PRAKASH, Sundeep et al., "A Nonblocking Algorithm for Shared Queues Using Compare-and-Swap," <i>IEEE Transactions on Computers</i> , vol. 43, no. 5, pp. 548-559, May 1994.	
JK	7	SHANN, Chien-Hua et al., "A Practical Nonblocking Queue Algorithm Using Compare-and Swap," <i>Proceedings of the Seventh International Conference on Parallel and Distributed Systems</i> p. 470, IEEE Computer Society, Washington, D.C., 2000.	
JK	8	SHAVIT, N., et al., "Elimination Trees and the Construction of Pools and Stacks," <i>Theory of Computing Systems</i> , vol. 30, pp. 645-670, 1997.	
JK	9	STONE, Janice M., "A simple and correct shared-queue algorithm using Compare-and-Swap," <i>Proceedings of the 1990 ACM/IEEE Conference on Supercomputing</i> , pp. 495-504, IEEE Computer Society, New York, NY, 1990.	
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Examiner Signature		Date Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

**1. Applicant's unique citation designation number (optional)**

<sup>2</sup>Applicant is to place a check mark here if English language Translation is attached

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DEC 30 2005 SEARCHED SERIALIZED INDEXED FILED	Filing Date: July 16, 2003
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	Examiner Name: Horace L. Flournoy
	Date Submitted: December 28, 2005

#### NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Include name of author (in CAPITAL LETTERS), title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
HF	1	HERLIHY, M.P., "Wait-Free Synchronization," <i>ACM Transactions On Programming Languages and Systems</i> , 11(1):124-149, January 1991.	
HF	2	MASSALIN, H., et al., "A Lock-Free Multiprocessor OS Kernel," Technical Report TR CUCS-005-9, Columbia University, New York, NY, 1991, 21 pages.	
HF	3	MASSALIN, Henry, "Synthesis: An Efficient Implementation of Fundamental Operating System Services," Dissertation submitted in partial fulfillment of the requirements for the Degree of Doctor of Philosophy in the Graduate School of Arts and Sciences, Columbia University, New York, NY, online, 158 pages, 1992 [retrieved from the Internet on 2001-07-13: URL:ftp://ftp.cs.columbia.edu/reports/reports-1992/cucs-039-92.ps.gz].	
HF	4	BERSHAD, B. N., "Practical Considerations For Non-Blocking Concurrent Objects," <i>Proceedings 13th IEEE International Conference on Distributed Computing Systems</i> , pp. 264-273. IEEE Computer Society Press, Washington, D.C., 1993.	
HF	5	ATTIYA, Hagit, et al., "Are Wait-Free Algorithms Fast?" <i>Journal of the ACM</i> , 41(4):725-763, July 1994.	
HF	6	LAMARCA, A., "A performance evaluation of lock-free synchronization protocols," <i>Proceedings of the 13th Annual ACM Symposium on Principles of Distributed Computing</i> , pp. 130-140, ACM Press, New York, NY, 1994.	
HF	7	ATTIYA, H., et al., "Universal Operations: Unary versus Binary," <i>Proceedings of the 15th Annual ACM Symposium on Principles of Distributed Computing</i> , pp. 223-232, ACM Press, New York, NY, 1996.	
HF	8	GREENWALD, M. B., et al., "The Synergy Between Non-Blocking Synchronization And Operating System Structure," <i>Proceedings of the 2nd Symposium on Operating Systems Design and Implementation</i> , pp. 123-136, Usenix Association, Berkeley, CA, 1996.	
HF	9	AFEK, Y., et al., "Disentangling Multi-Object Operations," <i>Proceedings of the 16th Annual ACM Symposium on Principles of Distributed Computing</i> , pp. 111-120, August 1997. Santa Barbara, CA.	
HF	10	ATTIYA, Hagit, et al., "Atomic Snapshots In O(n log n) Operations," <i>SIAM Journal on Computing</i> , 27(2):319-340, April 1998.	
Examiner Signature			Date Considered
			06/05/06

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Examiner Name: Horace L. Flournoy	
Date Submitted: December 15, 2005	

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U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Document Number Number-Kind Code <sup>2</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US-4,584,640	04-22-1986	MacGregor et al.	
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		US-5,319,778	06-07-1994	Catino, Robert J.	
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		US-6,581,063	06-17-2003	Kirkman, Richard Karl	
		US-6,651,146	11-18-2003	Srinivas et al.	

#### FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document Country Code <sup>3</sup> -Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		EP 0 366 585	05-02-1990	IBM		
		EP 0 466 339	01-15-1992	IBM		
		WO 86/00434	01-16-1986	Motorola		
		WO 01/53942	07-26-2001	Steele, Jr. et al.		
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<sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04.

<sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3)

<sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

<sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

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		Examiner Name: Horace L. Flournoy
Sheet 2 of 2		Date Submitted: December 15, 2005

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HF		US-6,826,757	11-30-2004	Steele, Jr. et al.	
HF		US-2001/0047361	11-29-2001	Martin et al.	
HF		US-2003/0140085	07-24-2003	Moir et al.	
HF		US-2003/0174572	09-18-2003	Moir et al.	
HF		US-2003/0182462	09-25-2003	Moir et al.	
HF		US-2003/0182465	09-25-2003	Moir et al.	
HF		US-2004/0153687	08-05-2004	Moir et al.	
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HF		WO 01/53943	07-26-2001	Steele, Jr. et al.	
HF		WO 01/80015	10-25-2001	Martin et al.	
HF		WO 01/82057	11-01-2001	Moir et al.	
HF		WO 03/060705	07-24-2003	Moir et al.	
		WO 03/060715	07-24-2003	Moir et al.	
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### LIST OF PENDING U. S. PATENT APPLICATIONS

The following pending U.S. patent applications are listed for consideration by the Examiner.

Examiner Initials	Cite No.	Document Identification
JK	1	US Patent Application No. 09/547,288 (Attorney Docket No. 004-4663), filed April 11, 2000 and naming as inventor(s) Shavit et al.
JK	2	US Patent Application No. 09/547,290 (Attorney Docket No. 004-4664), filed April 11, 2000 and naming as inventor(s) Shavit et al.
JK	3	US Patent Application No. 09/710,218 (Attorney Docket No. 004-4896), filed November 10, 2000 and naming as inventor(s) Harris, Timothy
JK	4	US Patent Application No. 09/837,671 (Attorney Docket No. 004-5723), filed April 18, 2001 and naming as inventor(s) Detlefs et al.

Examiner Signature

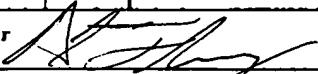
Date Considered:

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*Applicant(s) are providing a separate list of pending applications, pursuant to MPEP § 609III(D), to avoid publication of the application numbers on any patent that issues from the above-identified application. Applicant(s) request that the Examiner indicate consideration of the pending applications listed above in accordance with MPEP 609III(C)(2) and return a copy of this page with the next communication.*

U.S. Department of Commerce, Patent and Trademark Office		Attorney Docket No.: 004-8428
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O INFORMATION DISCLOSURE STATEMENT BY APPLICANT  SEP 29 2004 PATENT & TRADEMARK OFFICE		Applicant(s): Moir et al.
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AF	1	Afek, Yehuda et al., "Long-Lived Renaming Made Adaptive", 18 <sup>th</sup> Annual ACM Symposium on Principles of Distributed Computing, pages 91-104, 1999.
AF	2	Afek, Yehuda, "Wait-Free Made Fast", 27 <sup>th</sup> Annual ACM Symposium on Theory of Computing, pages 538-547, 1995.
AF	3	Agesen, Ole et al., "DCAS-Based Concurrent Deques", 12 <sup>th</sup> Annual ACM Symposium on Parallel Algorithms and Architectures, pages 137-146, July 2000.
AF	4	Anderson, James H. et al., "Using Local-Spin k-Exclusion Algorithms to Improve Wait-Free Object Implementations", 12 <sup>th</sup> Annual ACM Symposium on Principles of Distributed Computing, November 1995 (revised 1996, 1997).
AF	5	Arora, Niraj S. et al., "Thread Scheduling for Multiprogrammed Multiprocessors", 10 <sup>th</sup> Annual ACM Symposium on Parallel Algorithms and Architectures, pages 119-129, 1998.
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AF	7	Barnes, Greg, "A Method for Implementing Lock-Free Shared Data Structures", 5 <sup>th</sup> Annual ACM Symposium on Parallel Algorithms and Architectures, pages 261-270, 1993.
AF	8	Bayer, R. et al., "Concurrency of Operations on B-Trees", Acta Informatica, 1977.
AF	9	Detlefs, David L. et al., "Even Better DCAS-Based Concurrent Deques", 14 <sup>th</sup> International Conference on Distributed Computing, pages 59-73, 2000.
AF	10	Detlefs, David L. et al., "Lock-Free Reference Counting", 20 <sup>th</sup> Annual ACM Symposium on Principles of Distributed Computing, pages 190-199, 2001.
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AF	12	Greenwald, Michael B., "Non-Blocking Synchronization and System Design", PhD Thesis, Stanford University Technical Report STAN-CS-TR-1624, Palo Alto, California, August 1999.
AF	13	Herlihy, Maurice, "A Methodology for Implementing Highly Concurrent Data Objects", ACM Transactions on Programming Languages and Systems, pages 745-770, November 1993.
AF	14	Herlihy, Maurice, "Dynamic-Sized Lockfree Data Structures", Sun Microsystems Technical Report SMLI TR-2002-112, June 2002.
AF	15	Herlihy, Maurice et al., "Linearizability: A Correctness Condition for Concurrent Objects", ACM Transactions on Programming Languages and Systems, pages 463-492, July 1990.
AF	16	Herlihy, Maurice et al., "The Repeat Offender Problem: A Mechanism for Supporting Dynamic-Sized Lock-Free Data Structures", Sun Microsystems Technical Report SMLI TR-2002-112, June 2002.
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MF	17	Herlihy, Maurice et al., "Transactional Memory: Architectural Support for Lock-Free Data Structures", 20 <sup>th</sup> International Symposium in Computer Architecture, 1993.
MF	18	Herlihy, Maurice et al., "Obstruction-Free Synchronization: Double-Ended Queues as an Example", 23 <sup>rd</sup> International Conference on Distributed Computing, May 2003.
MF	19	Israeli, Amos et al., "Disjoint-Access-Parallel Implementations of Strong Shared Memory Primitives", 13 <sup>th</sup> Annual ACM Symposium on Principles of Distributed Computing, pages 151-160, 1994
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MF	21	Luchangco, Victor et al., "Nonblocking k-compare-single-swap", 15 <sup>th</sup> Annual ACM Symposium on Parallel Algorithms and Architectures, June 2003.
MF	22	Martin, Paul et al., "DCAS-Based Concurrent Deques Supporting Bulk Allocation", Sun Microsystems, Inc. Technical Report SMI TR-2002-111, October 2002.
MF	23	Michael, Maged M. et al., "Non-Blocking Algorithms and Preemption-Safe Locking on Multiprogrammed Shared Memory Multiprocessors", Journal of Parallel and Distributed Computing, March 1997.
MF	24	Michael, Maged M. et al., "Simple, Fast and Practical Non-Blocking and Blocking Concurrent Queue Algorithms", 15 <sup>th</sup> Annual ACM Symposium on Principles of Distributed Computing, pages 267-276, 1996.
MF	25	Michael, Maged M., "Safe Memory Reclamation for Dynamic Lock-Free Objects Using Atomic Reads and Writes", 21 <sup>st</sup> Annual ACM Symposium on Principles of Distributed Computing, pages 21-30, January 2002.
MF	26	Moir, Mark, "Laziness Pays! Using Lazy Synchronization Mechanisms to Improve Non-Blocking Constructions", 19 <sup>th</sup> Annual ACM Symposium on Principles of Distributed Computing, 2000.
MF	27	Moir, Mark, "Practical Implementations of Non-Blocking Synchronization Primitives", 16 <sup>th</sup> Annual ACM Symposium on Principles of Distributed Computing, 1997.
MF	28	Moir, Mark, "Transparent Support for Wait-Free Transactions", 11 <sup>th</sup> International Workshop on Distributed Algorithms, 1997.
MF	29	Moir, Mark et al., "Wait-Free Algorithms for Fast, Long-Lived Renaming", Science of Computer Programming, August 1994.
MF	30	Saks, Michael et al., "Optimal Time Randomized Consensus - Making Resilient Algorithms Fast in Practice", 2 <sup>nd</sup> ACM SIAM Symposium on Discrete Algorithms, pages 351-362, 1991.
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MF	32	Trieber, R, "Systems Programming: Coping with Parallelism", IBM Technical Report RJ5118, April 23, 1986.
MF	33	Turek, John et al., "Locking without Blocking: Making Lock Based Concurrent Data Structure Algorithms Nonblocking", 11 <sup>th</sup> ACM SIGACT-SIGMOD-SIGART Symposium on Principles of Database Systems, 1992.
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HF	1	5,428,761	Jun. 27, 1995	Herlihy et al.	
HF	2	US2004/0015510 A1	Jan. 22, 2004	Moir et al.	
HF	3	US2004/0034673 A1	Feb. 19, 2004	Moir et al.	
<b>Foreign Patent Documents</b>					
		Document	Date	Country	Translation
					Yes
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<b>OTHER ART (Including Author, Title, Date, Pertinent Pages, Etc.)</b>					
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